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T10N 175	128 128 184 184	:
TG. 1 CORPORATION 173 174 175	SHARED CALL APPRARANCE- 180	
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808 80% Welcome to (Service Provider's) IP Centrex Softphone Registration "SERVICE PROVIDER" IP CENTREX REGISTRATION 832 918 824 ENTER TELEPHONE NUMBER 858 458 **ENTER PASSWORD** 958 204 402 X X

FIG. 2

816

302	
100 3 3/6 _ 304	
100 The user contacts the service provider or the administrator 191 To 304 The user contacts the service provider or the administrator 191 The user contacts the service provider or the administrator 191	
326	1
The user contacts the service provider or the administrator 191	6
for the corporate Centrex Group and obtains a telephone number and password	
and the cite for the firegistration web site for the service	
provider that provides the IP Centrex service to the corporation.	
1 137 135 16 107	
The user plugs the PC into the ADSL line and activates a 2308	
standard web browser. The use enters the URL for the IP Centrex service	
117_provider. 914 137	
920	
191 Virgistration) /2/ - 310	
1 ne A server/prompts the user to enter the telephone	
number and password that the user wants to activate.	
The PC sends a message via TCP/IP to a Province Service Servic	
The PC sends a message via TCP/ID to a Production 1	
The PC sends a message via TCP/IP to a Registration Server attached to the core packet network. The message contains the user's IP	
address and telephone number and password that the user wants to activate.	
147 191 328 137	
$V = \frac{120}{2}$	
The registration server determines the IP address for the	
Gateway that serves the telephone number.	
114 920 191 334	
- 2/2	
The registration server forwards the registration request to the Gateway.	
LIIV	
114 328 - 318	
The Gateway validates the password is	
appropriated for the telephone number.	
191	
135 154 -320	
If the password is appropriate, the 'Gateway sends to the PC the IP address of the Gatekeeper that should be used for	
To the PC the IP address of the Gatekeeper that should be used for IP Telephony. 922 147	•
928	
1, 114 924 125 1 924	
ine registration/process/may also linclude/downloading/from	•
Gateway software to the PC. This software may include the ID	
1 cicpliony messages sets, application program user interface consumer 420	
This insures that the IP Telephony software on the PC is consistent with	
the IP Telephony software on the Gateway. 135	
() / () / ? /	
~932 114	
FIG. 3	

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FIG. 4	7.87 2.42 7.74 2.50 2.50 2.50 2.50 2.50
8	
202 204	2.2.2 186 LINE 2 BUSINESS 847-290-3000 260 _ 2.24 CONF DROP HOLD TRNSF
708	181 194 23.2 23.2 ENTER NUMBER Z46 Z48 Z48 Z48 CALL ID CALL ID CALL ID CALL ID CALL ID
132	SEND SEND CONTRACTOR OF THE SEND CONTRACTOR O
124 904 } \ \ \ \ \ \ Telephone -	LINE 1 PERSONAL 630-377-1234 1927 (191) 216 CONF DROP HOLD TRNSF
03 ← tual	MS J J S D D D D D D D D D D D D D D D D
001	212 4 LIII 212 4 LIII 254 734 736 4 256 4 256 4 256 4 256 7 256 7 256 7 256 7 257 258
7	↑

The user activates the Multi Call Appearance Virtual Telephone application software program on the PC. The user enters the called number into the "Enter Number" field for personal line or the "Enter Number" field for the business line. 224 24Z \186 1,230 The user clicks on the "SEND" button for the corresponding call appearance. The PC application program looks up in memory the IP address for the VoIP Gateway of the corresponding call appearance. The PC formats a H.323 call request message that contains "Enter Number" information and has a destination address of the corresponding VoIP Gateway. The source address of the message is the IP address of the PC The PC sends the H.323 message to the VoIP Gateway over the IP Network. -418 The VoIP Gateway receives the H.323 message and initiates a standard H.323 call setup sequence with the PC. 422 The call request message also contains the phone number of call appearance I, that initiated the call request.

The VoIP Gateway detects a request from a switch to/complete an incoming call to an analog line or ISDN line served by the VoIP Gateway. If the request is to am analog line, the VoIP detects ringing current on the line. If the request is to am ISDN line, the VoIP detects ringing current on the line. If the request is to an ISDN line, the VoIP detects ringing current on the line. If the request is to an ISDN line, the VoIP detects ringing current on the line. If the request is to an ISDN line, the VoIP detects ringing current on the line. If the request is to an ISDN line, the VoIP Gateway looks up in memory the IP address for the VoIP H323 end point (virtual telephone) that corresponds to the analog or ISDN line port on the VoIP Gateway. 114 117 135 536 111 117 address of the VoIP Gateway, The call request message contains the incoming caller ID information, if available. 114 536 135 170 118 The call set up request messages is sent to the PC over the IP network. 118 135 136 170 180 119 180 180 The program looks at the IP source address and determines which call appearance virtual Telephone application program. 120 180 The program looks at the IP source address and determines which call appearance should be used for the incoming call. 180 181 120 180 180 The program generates ringing (or other alerting sound) and displays the incoming caller ID information in the "Incoming Call ID" field of the appropriate call appearance. 1818 180 1842 180 180 The user answers the call by clicking on the "SEND" box on the appropriate call appearance. 180 180 184 The PC and VoIP Gateway then proceed with standard H323 VoIP call set up		-504
an analog line or ISDN line served by the VolP Gateway. If the request is to an 524 analog line, the VolP detects ringing current on the line. If the request is to an ISDN line, the VolP detects ringing current on the line. If the request is to an ISDN line, the VolP Gateway looks up in memory the IP address for the VolP H.323 end point (virtual telephone) that corresponds to the analog or ISDN line port on the VolP Gateway. 1147 135 536 111 538 The VolP Gateway generates a H.323 call set up request message. The IP 540 4510 destination address is the IP address of the user's PC. The IP source address is the IP address of the VolP Gateway. The call request message contains the incoming caller ID information, if available. 1147 536 170 512 The call set up request messages is sent to the PC over the IP network. 135	1 524 11/ 114 53	0,00
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ine, the VoIP freceives a Q.931 call request message. 19	he you dateway detects/a request from a switch to/complete an incomplete	ming call to
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